

Table 3AB, Genes Specific to OA (Mild and Severe) But Removing Genes Relevant to Co-Morbidities of OA & Hypertension, OA & Obesity, OA & Asthma, OA & Allergies, and OA & Systemic Steroids							Protein Acc. No.	
Spot	p-value	Clone ID	Gene Symbol	Description	Gene Acc No			
8558	0.0480407	fcrb4582		ni69a04.s1 NCI_CGAP_Pr12 cDNA clone IMAGE:982062, mRNA sequence /clone=IMAGE:982062 /gb=AA522457 /gi=2263169 /ug=Hs.203557 /len=461	AA522457		NP_060882	
2001	0.0171326	hfcf2740		mRNA for KIAA0892 protein, partial cds. /cds=(1,1867) /gb=AB020699 /gi=4240272 /ug=Hs.112751 /len=4164	AB020699		BAA74915	
6913	0.0050966	ncrc9079		mRNA for KIAA1013 protein, partial cds. /cds=(1,3189) /gb=AB023230 /gi=4589675 /ug=Hs.96427 /len=4783	AB023230		BAA76857	
2108	0.0245794	ncrb3700		mRNA for KIAA1558 protein, partial cds	AB046778		BAB13384	
2735	0.0258088	miod1073		mRNA for KIAA1694 protein, partial cds. /cds=(1,2275) /gb=AB051481 /gi=12697932 /ug=Hs.19597 /len=4235	AB051481		BAB21785	
13980	0.0350905	seob1724		mRNA for KIAA1818 protein, partial cds	AB058721		BAB47447	
14601	0.0032876	fcrb1707		RPS27 gene for ribosomal protein S27, complete cds and sequence	AB061845		BAB79483	
11589	0.0089568	seoa6633		chromosome 5 clone CTC-554D6, complete sequence	AC008575			
11583	0.0191393	miob2366		chromosome 5 clone CTD-237614, complete sequence	AC008972			
14338	0.0189791	mioc3955		chromosome 5 clone CTB-113P19, complete sequence	AC011374			
5940	0.0236035	miob0304		BAC clone RP11-321E13 from 2, complete sequence	AC012358			
13460	0.0437944	seoa6487		clone RP11-25H20, complete sequence	AC016207			

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Spot	p-value	Clone ID	Gene Symbol	Description	Gene Acc No		
14079	0.0495134	ncr9909		chromosome 17, clone RP11-727G18, complete sequence	AC068576		
7849	0.0259147	seoa7635		12 BAC RP11-546D6 (Roswell Park Cancer Institute BAC Library) complete sequence	AC073857		
10844	0.0411778	seoa5636		3 BAC RP11-370M22 (Roswell Park Cancer Institute BAC Library) complete sequence	AC078953		
5973	0.004408	mioa9398		12 BAC RP11-536G4 (Roswell Park Cancer Institute BAC Library) complete sequence	AC090001		
1471	0.0060167	seob4467		chromosome 3 clone RP11-301D8, complete sequence	AC093142		
5786	0.0470292	ncr3164		chromosome 16 clone RP11-410N2, complete sequence	AC093491		
10610	0.0281675	mioc8047		BAC clone RP11-560P13 from 2, complete sequence	AC105396		
13069	0.004824	seoc5351		chromosome 5 clone RP11-65F13, complete sequence	AC106818		
11185	0.0180785	ncrb6103		chromosome 3 clone RP11-350F11, complete sequence	AC112516		
10365	0.0212269	ncr0356		chromosome 5 clone RP11-549J18, complete sequence	AC114980		
7751	0.0363465	seob8997		3 BAC RP11-643E20 (Roswell Park Cancer Institute BAC Library) complete sequence	AC135893		
13705	0.0247759	mioc0950		hemacentin mRNA, complete cds /cds=(230,17140) /gb=AF156100 /gi=14575678 /ug=Hs.334485 /len=18207	AF156100		AAK68690

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Spot	p-value	Clone ID	Gene Symbol	Description	Gene Acc No		
13008	0.0220675	mioc6774		wc41h02.x1 NCI_CGAP_Pr28 cDNA clone IMAGE:2321235 3', mRNA sequence /clone=IMAGE:2321235 /clone_end=3' /gb=AI800041 /gi=5365513 /ug=Hs.369733 /len=504	AI800041		
12377	0.0455694	mioc0011		ts88e10.x1 NCI_CGAP_GC6 cDNA clone IMAGE:2238378 3' similar to contains L1.t3 L1 repetitive element ;. mRNA sequence /clone=IMAGE:2238378 /clone_end=3' /gb=AI918786 /gi=5638641 /ug=Hs.212310 /len=459	AI918786		
7859	0.0229721	seob1075		AJ318805 adipose tissue cDNA clone 2040, mRNA sequence /clone=2040 /gb=AJ318805 /gi=18141682 /ug=Hs.86538 /len=5223	AJ318805		
8354	0.0350244	seoa8466		cDNA FLJ11335 fis, clone PLACE1010630. /gb=AK002197 /gi=7023924 /ug=Hs.284270 /len=1984	AK002197	Q9P2K6	
1791	0.0223306	fcrb6296		cDNA FLJ30885 fis, clone FEBRA2004987. /gb=AK055447 /gi=16550174 /ug=Hs.130866 /len=2618	AK055447		
7014	0.0077701	fcr0161		cDNA FLJ32120 fis, clone PEBLM1000068, highly similar to ACTIN, CYTOPLASMIC TYPE 5	AK056682		
5739	0.0447304	hfcr1379		cDNA FLJ25260 fis, clone STM04650, highly similar to TROPOMYOSIN, FIBROBLAST ISOFORM 2	AK057989	P09493	

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14154	0.041695	ncrc2187		cDNA FLJ36977 fis, clone BRACE2006344. /gb=AK094296 /gi=21753327 /ug=Hs.151143 /len=1678	AK094296	
7393	0.0276078	fcrb3540		cDNA FLJ37957 fis, clone CTONG2009529. /cds=(312,749) /gb=AK095276 /gi=21754501 /ug=Hs.46519 /len=2791	AK095276	BAC04519
12354	0.013169	fcr2502		cDNA FLJ39824 fis, clone SPLEN2011981. /cds=(526,1644) /gb=AK097143 /gi=21756812 /ug=Hs.381885 /len=2110	AK097143	
4029	0.0410369	mioa0890		cDNA FLJ39995 fis, clone STOMA2002141	AK097314	
12422	0.0211795	mioc1755		mRNA; cDNA DKFZp434J0828 (from clone DKFZp434J0828)	AL133094	
9828	0.0465361	ncr8991		mRNA; cDNA DKFZp434O1521 (from clone DKFZp434O1521)	AL133663	
14029	0.0338616	ncr6543		DNA sequence from clone RP3-331H24 on chromosome 6 Contains a putative novel gene, part of the gene for hypothetical protein FLJ21079, similar to opioid growth factor receptor, ESTs, STSS, GSSs and a CpG island, complete sequence	AL136164	
14515	0.0120846	ncr1601		DNA sequence from clone RP11-48719 on chromosome X, complete sequence	AL161624	
9630	0.0388375	seoc0639		mRNA; cDNA DKFZp761K1115 (from clone DKFZp761K1115); partial cds	AL162046	CAB82389

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1931	0.0003467	fcr4364		chromosome 14 DNA sequence BAC R-932A10 of library RPCI-11 from chromosome 14 of complete sequence	AL355834		
12645	0.0167324	ncr2016		DNA sequence from clone RP11-428L19 on chromosome 9, complete sequence	AL359253		
11487	0.0020799	miod6765		mRNA; cDNA DKFZp547B2013 (from clone DKFZp547B2013)	AL512730		
8493	0.0078842	ncr0166		DNA sequence from clone RP11-290B1 on chromosome 1, complete sequence	AL592487		
11172	0.0277965	mioc9814		mRNA; cDNA DKFZp313G0615 (from clone DKFZp313G0615) /gb=AL833102 /gi=21733693 /ug=Hs.125779 /len=2124	AL833102		
6143	0.043378	fcr4460		mRNA; cDNA DKFZp686G1167 (from clone DKFZp686G1167) /gb=AL833600 /gi=21734246 /ug=Hs.7720 /len=8355	AL833600		
4394	0.0307351	miod1781		mRNA; cDNA DKFZp667K0921 (from clone DKFZp667K0921)	AL833671		
3423	0.0079798	seob5816		genomic DNA, chromosome 11q, clone:RP11-878E11, complete sequence	AP000767		
14843	0.0342756	miod6216		genomic DNA, chromosome 11 clone:RP11-567M21, complete sequence	AP003041		
9822	0.0135936	ncrb6932		genomic DNA, chromosome 18 clone:RP11-637N19, complete sequence	AP005060		

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12682	0.012595	ncrb2395		xv47e06.x1 Soares_NFL_T_GBC_S1 cDNA clone IMAGE:2816290 3' similar to WP:Y18D10A.6 CE21402 SODIUM/HYDROGEN EXCHANGER FAMILY ; mRNA sequence /clone=IMAGE:2816290 /clone_end=3' /gb=AW270137 /gi=6657167 /ug=Hs.371190 /len=478	AW270137	
13818	0.0272803	seoc2733	LHX	bladder cancer-related protein (LHX) gene, partial 3'UTR sequence	AY034106	
7231	0.0152474	ncrc1103		clone MGC:29744 IMAGE:3347567, mRNA, complete cds /cds=(1622,2545) /gb=BC021250 /gi=20987353 /ug=Hs.29645 /len=2712	BC021250	AAH21250
3365	0.0114201	seob1793		clone IMAGE:4479651, mRNA /gb=BC022934 /gi=18605701 /ug=Hs.433247 /len=2657	BC022934	O43237
11447	0.0122758	miod5984		hypothetical gene supported by AK000174; AK055070; AK055612, clone IMAGE:4836971, mRNA	BC028585	
8762	0.0390255	miod7278		Similar to ATP/GTP-binding protein, clone MGC:32955 IMAGE:5267615, mRNA, complete cds /cds=(234,2099) /gb=BC030651 /gi=22658304 /ug=Hs.216044 /len=3000	BC030651	AAH30651
3196	0.0159789	fcrb6345		clone IMAGE:3921971, mRNA, partial cds (=BC020237.1)	BC032295	AAH32295
7478	0.0098092	fcrb9751		clone IMAGE:4538370, mRNA	BC034439	NP_055425
7640	0.0497108	mioc4547		clone IMAGE:5264837, mRNA /gb=BC035149 /gi=23242682 /ug=Hs.247309 /len=2127	BC035149	

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11476	0.0044785	seoc2280		clone IMAGE:3866125, mRNA /gb=BC035467 /gi=22028050 /ug=Hs.301226 /len=2297	BC035467		
8541	0.034907	ncrc2878		clone IMAGE:5266665, mRNA, partial cds	BC036526	AAH36526	
10368	0.0317389	ncrc0055		clone IMAGE:4750477, mRNA	BC038347		
14374	0.0307727	miod5507		RC4-HT0277-160200-013-d07 HT0277 cDNA, mRNA sequence /gb=BE151126 /gi=8613847 /ug=Hs.158600 /len=571	BE151126		
12398	0.0299803	frc6756		MR2-NT0138-131200-007-h02 NT0138 cDNA, mRNA sequence /gb=BF930590 /gi=12348018 /ug=Hs.150059 /len=561	BF930590		
13489	0.0192418	seob5254		602300922F1 NIH_MGC_87 cDNA clone IMAGE:4402684 5', mRNA sequence /clone=IMAGE:4402684 /clone_end=5' /gb=BG034754 /gi=12428380 /ug=Hs.406233 /len=993	BG034754		
13962	0.0399344	seob6434		602591134F1 NIH_MGC_77 cDNA clone IMAGE:4717761 5', mRNA sequence /clone=IMAGE:4717761 /clone_end=5' /gb=BG570144 /gi=13577797 /ug=Hs.437115 /len=672	BG570144		
12411	0.0452134	miob9658		UI-H-ED1-ayc-o-24-0-UI.s1 NCI_CGAP_ED1 cDNA clone IMAGE:5837039 3', mRNA sequence /clone=IMAGE:5837039 /clone_end=3' /gb=BQ015020 /gi=19739921 /ug=Hs.37251 /len=1138	BQ015020		

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11671	0.0362688	ncr1423		UI-H-DPO-avb-p-04-0-UI.s1 NCI_CGAP_Fs1 cDNA clone IMAGE:5877363 3', mRNA sequence /clone=IMAGE:5877363 /clone_end=3' /gb=BQ020727 /gi=19756005 /ug=Hs.446656 /len=1208	BQ020727
12115	0.0213303	seob3962		UI-H-EZ1-bbe-e-05-0-UI.s1 NCI_CGAP_Ch2 cDNA clone UI-H-EZ1-bbe-e-05-0-UI 3', mRNA sequence /clone=UI-H-EZ1-bbe-e-05-0-UI /clone_end=3' /gb=BQ575227 /gi=21478544 /ug=Hs.127009 /len=1049	BQ575227
10654	0.0091191	seoc4164		AGENCOURT_7968233 NIH_MGC_67 cDNA clone IMAGE:6170681 5', mRNA sequence /clone=IMAGE:6170681 /clone_end=5' /gb=BU189828 /gi=22703812 /ug=Hs.258214 /len=956	BU189828
10668	0.03012	miod6539		UI-H-FH1-bfh-g-05-0-UI.s1 NCI_CGAP_FH1 cDNA clone UI-H-FH1-bfh-g-05-0-UI 3', mRNA sequence /clone=UI-H-FH1-bfh-g-05-0-UI /clone_end=3' /gb=BU618251 /gi=23284466 /ug=Hs.396671 /len=1126	BU618251



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14385	0.0100465	seoc0371		UI-H-FL1-bfx-b-02-0-UI.s1 NCI_CGAP_FL1 cDNA clone UI-H-FL1-bfx-b-02-0-UI 3', mRNA sequence /clone=UI-H-FL1-bfx-b-02-0-UI /clone_end=3' /gb=BU620781 /gi=23286996 /ug=Hs.120850 /len=1126	BU620781	
10209	0.0317088	seob4458		BX092060 NCI_CGAP_Pr12 cDNA clone IMAGp998O033151 ; IMAGE:1252442, mRNA sequence /clone=IMAGp998O033151 ; IMAGE:1252442 /gb=BX092060 /gi=27825122 /ug=Hs.148162 /len=373	BX092060	
10267	0.0479015	ncr1529		BX114194 Soares melanocyte 2NbHM cDNA clone IMAGp998J14570, mRNA sequence /clone=IMAGp998J14570 ; IMAGE:261229 /gb=BX114194 /gi=27838661 /ug=Hs.176420 /len=687	BX114194	
12067	0.0288807	seob0296		UI-H-ED1-axq-o-07-0-UI.s1 NCI_CGAP_ED1 cDNA clone UI-H-ED1-axq-o-07-0-UI 3', mRNA sequence /clone=UI-H-ED1-axq-o-07-0-UI /clone_end=3' /gb=CA445564 /gi=24809984 /ug=Hs.243319 /len=539	CA445564	
12063	0.0438975	seoa8827		Mus musculus mitochondrion, complete genome	NC_001569	NP_008108
11965	0.0181392	seob9652		Rattus norvegicus mitochondrial genome	NC_001665	
5911	0.0087724	mioa2569		mitochondrion, complete genome	NC_001807	
10507	0.0402134	mioc0393		mitochondrion, complete genome	NC_001807	

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5994	0.0406563	miob4975	IF	I factor (complement) (IF), mRNA /cds=(15,1766) /gb=NM_000204 /gi=4504578 /ug=Hs.36602 /len=1963	NM_000204	NP_000195
6716	0.007502	fcrb1950	RPL21	ribosomal protein L21 (RPL21), mRNA /cds=(30,512) /gb=NM_000982 /gi=18104947 /ug=Hs.431927 /len=568	NM_000982	NP_000973
5750	0.019226	hfc3622	CDC2-rela1	cyclin-dependent kinase 9 (CDC2-related kinase) (CDK9), mRNA /cds=(99,1217) /gb=NM_001261 /gi=17017983 /ug=Hs.150423 /len=1791	NM_001261	NP_001252
6242	0.0097769	ncr0210		disabled 2, mitogen-responsive phosphoprotein (Drosophila) (DAB2), mRNA /cds=(145,2457) /gb=NM_001343 /gi=4503250 /ug=Hs.81988 /len=3268	NM_001343	NP_001334
3922	0.0045032	ncr4696	FLNB	filamin B, beta (actin binding protein 278) (FLNB), mRNA /cds=(132,7940) /gb=NM_001457 /gi=4503746 /ug=Hs.81008 /len=9432	NM_001457	NP_001448
4358	0.0350369	miod1714	CSNK1A1	casein kinase 1, alpha 1 (CSNK1A1), mRNA /cds=(140,1153) /gb=NM_001892 /gi=19923745 /ug=Hs.283738 /len=2080	NM_001892	NP_001883
14058	0.028823	ncr4452	FBLN2	fibulin 2 (FBLN2), mRNA /cds=(70,3624) /gb=NM_001998 /gi=4503664 /ug=Hs.198862 /len=4139	NM_001998	NP_001989
6490	0.0392753	miob3396	MT1L	metallothionein 1L (MT1L), mRNA /cds=(53,238) /gb=NM_002450 /gi=4505270 /ug=Hs.380778 /len=415	NM_002450	

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5902	0.0300378	mioa1062	PSMC2	proteasome (prosome, macropain) 26S subunit, ATPase, 2 (PSMC2), mRNA /cds=(71,1372) /gb=NM_002803 /gi=24430152 /ug=Hs.61153 /len=1545	NM_002803	NP_002794
2306	0.0104761	seoa1552	S100A4	S100 calcium binding protein A4 (calcium protein, calvasculin, metastasin, murine placental (S100A4), transcript variant 1, mRNA /cds=(70,375) /gb=NM_002961 /gi=9845514 /ug=Hs.81256 /len=512	NM_002961	NP_002952
5044	0.0048495	ncrc9469	S100A4	S100 calcium binding protein A4 (calcium protein, calvasculin, metastasin, murine placental (S100A4), transcript variant 1, mRNA /cds=(70,375) /gb=NM_002961 /gi=9845514 /ug=Hs.81256 /len=512	NM_002961	
1877	0.040896	fcr0665	SRPR	signal recognition particle receptor ('docking protein') (SRPR), mRNA /cds=(52,1968) /gb=NM_003139 /gi=23308696 /ug=Hs.75730 /len=2958	NM_003139	NP_003130
5790	0.0236813	ncr3778	TBP	TAF2 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 150kDa (TAF2), mRNA /cds=(271,3870) /gb=NM_003184 /gi=20357590 /ug=Hs.122752 /len=5019	NM_003184	NP_003175
6130	0.032103	fcr1844	CXorf12	chromosome X open reading frame 12 (CXorf12), mRNA /cds=(285,1070) /gb=NM_003492 /gi=4504738 /ug=Hs.23119 /len=1411	NM_003492	NP_003483

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4811	0.0328448	fcrb2160	GGH	gamma-glutamyl hydrolase (conjugase, folypolygammaglutamyl hydrolase) (GGH), mRNA /cds=(60,1016) /gb=NM_003878 /gi=4503986 /ug=Hs.78619 /len=1280	NM_003878	NP_003869
5591	0.0429154	fcrb8208		SEC22 vesicle trafficking protein-like 3 (S. cerevisiae) (SEC22L3), transcript variant 2, mRNA /cds=(119,871) /gb=NM_004206 /gi=21536310 /ug=Hs.12942 /len=1519	NM_004206	NP_004197
4525	0.0267671	mioa7299	U5-116KD	U5 snRNP-specific protein, 116 kD (U5-116KD), mRNA /cds=(61,2979) /gb=NM_004247 /gi=4759279 /ug=Hs.151787 /len=3784	NM_004247	NP_004238
13203	0.039573	mioc1198	BNIP3L	BCL2/adenovirus E1B 19kDa interacting protein 3-like (BNIP3L), mRNA /cds=(83,742) /gb=NM_004331 /gi=4757859 /ug=Hs.132955 /len=1337	NM_004331	NP_004322
10057	0.0217666	seob9614	NAP1L3	nucleosome assembly protein 1-like 3 (NAP1L3), mRNA /cds=(265,1785) /gb=NM_004538 /gi=21327709 /ug=Hs.21365 /len=2634	NM_004538	NP_004529
1800	0.013019	fcrb7070	SAE1	SUMO-1 activating enzyme subunit 1 (SAE1), mRNA /cds=(46,1086) /gb=NM_005500 /gi=4885584 /ug=Hs.279868 /len=2119	NM_005500	NP_005491
3952	0.0411403	ncr3434	IL18BP	interleukin 18 binding protein (IL18BP), transcript variant C, mRNA /cds=(929,1522) /gb=NM_005699 /gi=27502394 /ug=Hs.325978 /len=3630	NM_005699	NP_005690

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1784	0.0076512	fcrb4925	TSPAN-3	tetraspan 3 (TSPAN-3), mRNA /cds=(218,979) /gb=NM_005724 /gi=21264581 /ug=Hs.100090 /len=1842	NM_005724	NP_005715
4731	0.0307217	seob1316	TP53BPL	tumor protein p53-binding protein (TP53BPL), mRNA /cds=(541,2988) /gb=NM_005802 /gi=5032190 /ug=Hs.179982 /len=3549	NM_005802	NP_005793
1879	0.0433004	fcr0990	RAB9P40	Rab9 effector p40 (RAB9P40), mRNA /cds=(150,1268) /gb=NM_005833 /gi=5032014 /ug=Hs.19012 /len=1297	NM_005833	NP_005824
9433	0.0197163	fcr6563	RBM12	RNA binding motif protein 12 (RBM12), transcript variant 1, mRNA /cds=(275,3073) /gb=NM_006047 /gi=23510460 /ug=Hs.180895 /len=6650	NM_006047	NP_006038
3364	0.0313213	seob1617	LANCL1	LanC lantibiotic synthetase component C-like 1 (bacterial) (LANCL1), mRNA /cds=(105,1304) /gb=NM_006055 /gi=5174444 /ug=Hs.13351 /len=4544	NM_006055	NP_006046
5450	0.0429692	ncrc4226	PDGFRL	platelet-derived growth factor receptor-like (PDGFRL), mRNA /cds=(62,1189) /gb=NM_006207 /gi=5453871 /ug=Hs.170040 /len=1502	NM_006207	NP_006198
4309	0.0412157	hfc3500	NPEPPS	aminopeptidase puromycin sensitive (NPEPPS), mRNA /cds=(196,2823) /gb=NM_006310 /gi=15451906 /ug=Hs.293007 /len=4177	NM_006310	NP_006301

Table 3AB, Genes Specific to OA (Mild and Severe) But Removing Genes Relevant to Co-Morbidities of OA & Hypertension, OA & Obesity, OA & Asthma, OA & Allergies, and OA & Systemic Steroids						
Spot	p-value	Clone ID	Gene Symbol	Description	Gene Acc No	Protein Acc. No.
4732	0.0453612	seob1420	MUF1	MUF1 protein (MUF1), mRNA /cds=(1,1854) /gb=NM_006369 /gi=5453747 /ug=Hs.172210 /len=2165	NM_006369	NP_006360
2699	0.0452212	miob0178	TCTEL1	t-complex-associated-testis-expressed 1-like 1 (TCTEL1), mRNA /cds=(1,342) /gb=NM_006519 /gi=5730084 /ug=Hs.266940 /len=713	NM_006519	NP_006510
4151	0.0343604	miob3456	SLA	Src-like-adaptor (SLA), mRNA /cds=(42,872) /gb=NM_006748 /gi=5803170 /ug=Hs.75367 /len=2665	NM_006748	NP_006739
1268	0.0125613	seob7584	SKP1A	S-phase kinase-associated protein 1A (p19A) (SKP1A), transcript variant 1, mRNA /cds=(140,622) /gb=NM_006930 /gi=25777710 /ug=Hs.171626 /len=2172	NM_006930	NP_008861
5680	0.0282776	fcr5222	CPSF6	cleavage and polyadenylation specific factor 6, 68kDa (CPSF6), mRNA /cds=(35,1690) /gb=NM_007007 /gi=5901927 /ug=Hs.64542 /len=3426	NM_007007	NP_008938
5542	0.0357187	fcrb6874	ATP5I	ATP synthase, H transporting, mitochondrial F0 complex, subunit e (ATP5I), mRNA /cds=(64,273) /gb=NM_007100 /gi=6005716 /ug=Hs.85539 /len=336	NM_007100	NP_009031
6496	0.0345777	miob4673	TMF1	TATA element modulatory factor 1 (TMF1), mRNA /cds=(1,3282) /gb=NM_007114 /gi=6005903 /ug=Hs.267632 /len=3282	NM_007114	NP_009045
4580	0.0441784	miob3044	ZNF208	zinc finger protein 208 (ZNF208), mRNA /cds=(1,3504) /gb=NM_007153 /gi=6005975 /ug=Hs.55452 /len=3504	NM_007153	NP_009084

Table 3AB, Genes Specific to OA (Mild and Severe) But Removing Genes Relevant to Co-Morbidities of OA & Hypertension, OA & Obesity, OA & Asthma, OA & Allergies, and OA & Systemic Steroids						
Spot	p-value	Clone ID	Gene Symbol	Description	Gene Acc No	Protein Acc. No.
5990	0.0200977	miob4055	PRKA	A kinase (PRKA) anchor protein 2 (AKAP2), transcript variant 1, mRNA /cds=(181,3492) /gb=NM_007203 /gi=22325354 /ug=Hs.42322 /len=7522	NM_007203	NP_009134
5028	0.026245	fcrb5254	NCBP2	nuclear cap binding protein subunit 2, 20kDa (NCBP2), mRNA /cds=(27,497) /gb=NM_007362 /gi=19923386 /ug=Hs.240770 /len=2120	NM_007362	NP_031388
6372	0.0394625	mioa1494	CD2AP	CD2-associated protein (CD2AP), mRNA /cds=(51,1970) /gb=NM_012120 /gi=11321633 /ug=Hs.374340 /len=4658	NM_012120	NP_036252
2047	0.0389497	ncr3963	P8	p8 protein (candidate of metastasis 1) (P8), mRNA /cds=(103,351) /gb=NM_012385 /gi=6912569 /ug=Hs.424279 /len=719	NM_012385	NP_036517
2366	0.0448457	fcr4885	DNCL2A	dynein, cytoplasmic, light polypeptide 2A (DNCL2A), mRNA /cds=(47,337) /gb=NM_014183 /gi=7661821 /ug=Hs.100002 /len=687	NM_014183	NP_054902
5259	0.0103492	seob5773	NMP200	nuclear matrix protein NMP200 related to splicing factor PRP19 (NMP200), mRNA /cds=(208,1722) /gb=NM_014502 /gi=7657380 /ug=Hs.173980 /len=2167	NM_014502	NP_055317
11813	0.0433384	fcr7240	PIK3R4	phosphoinositide-3-kinase, regulatory subunit 4, p150 (PIK3R4), mRNA /cds=(543,4619) /gb=NM_014602 /gi=23943911 /ug=Hs.83050 /len=5060	NM_014602	NP_055417

Table 3AB, Genes Specific to OA (Mild and Severe) But Removing Genes Relevant to Co-Morbidities of OA & Hypertension, OA & Obesity, OA & Asthma, OA & Allergies, and OA & Systemic Steroids						
Spot	p-value	Clone ID	Gene Symbol	Description	Gene Acc No	Protein Acc. No.
6383	0.0406914	mioa3629	S100A6	S100 calcium binding protein A6 (calyculin) (S100A6), mRNA /cds=(103,375) /gb=NM_014624 /gi=9845517 /ug=Hs.275243 /len=470	NM_014624	NP_055439
6788	0.0041401	ncrb8392	S100A6	S100 calcium binding protein A6 (calyculin) (S100A6), mRNA /cds=(103,375) /gb=NM_014624 /gi=9845517 /ug=Hs.275243 /len=470	NM_014624	
6015	0.0457054	miob1493	KIAA0373	KIAA0373 gene product (KIAA0373), mRNA /cds=(1181,5800) /gb=NM_014684 /gi=7662079 /ug=Hs.150444 /len=5967	NM_014684	NO DATA
13132	0.025742	frcr5351	ENDOFIN	endosome-associated FYVE-domain protein (ENDOFIN), mRNA /cds=(249,4868) /gb=NM_014733 /gi=7662047 /ug=Hs.83790 /len=6632	NM_014733	NP_055548
3545	0.0302173	ncrc4600	KIAA0164	KIAA0164 gene product (KIAA0164), mRNA /cds=(254,3016) /gb=NM_014739 /gi=7661957 /ug=Hs.80338 /len=5538	NM_014739	NO DATA
9959	0.0214862	mioc0630	ZFXH1B	zinc finger homeobox 1b (ZFXH1B), mRNA /cds=(445,4089) /gb=NM_014795 /gi=7662183 /ug=Hs.34871 /len=5523	NM_014795	NP_055610
2302	0.0316021	mioc0884	ANKRD6	ankyrin repeat domain 6 (ANKRD6), mRNA /cds=(169,2247) /gb=NM_014942 /gi=7662405 /ug=Hs.30991 /len=5080	NM_014942	NO DATA
6559	0.0096691	seoa2391	KIFAP3	kinesin-associated protein 3 (KIFAP3), mRNA /cds=(272,2650) /gb=NM_014970 /gi=18105053 /ug=Hs.171374 /len=2997	NM_014970	NP_055785



Table 3AB, Genes Specific to OA (Mild and Severe) But Removing Genes Relevant to Co-Morbidities of OA & Hypertension, OA & Obesity, OA & Asthma, OA & Allergies, and OA & Systemic Steroids						
Spot	p-value	Clone ID	Gene Symbol	Description	Gene Acc No	Protein Acc. No.
13329	0.0226992	seob8501	KIAA1037	KIAA1037 protein (KIAA1037), mRNA /cds=(399,2429) /gb=NM_015023 /gi=22095348 /ug=Hs.172825 /len=4305	NM_015023	NP_055838
4208	0.0203901	seoa7509	RRS1	of yeast ribosome biogenesis regulatory protein RRS1 (RRS1), mRNA /cds=(99,1196) /gb=NM_015169 /gi=14719401 /ug=Hs.71827 /len=1718	NM_015169	NP_055984
9276	0.0214196	seoc1425	DKFZP586	DKFZP586G1517 protein (DKFZP586G1517), mRNA /cds=(127,2328) /gb=NM_015440 /gi=24308062 /ug=Hs.44155 /len=2749	NM_015440	NP_056255
3698	0.0060947	fcrb9694	EHZF	early hematopoietic zinc finger (EHZF), mRNA /cds=(150,4085) /gb=NM_015461 /gi=24308068 /ug=Hs.26799 /len=4869	NM_015461	NP_056276
3686	0.0251175	fcrb8504	AUTS2	autism susceptibility candidate 2 (AUTS2), mRNA /cds=(322,4101) /gb=NM_015570 /gi=17864089 /ug=Hs.32168 /len=5972	NM_015570	NP_056385
8517	0.0409078	fcrb1382	DKFZP434	DKFZP434M154 protein (DKFZP434M154), mRNA /cds=(345,2099) /gb=NM_015649 /gi=24308114 /ug=Hs.154680 /len=2630	NM_015649	NP_056464
4541	0.0293216	mioa2333	KBF2	H-2K binding factor-2 (KBF2), mRNA /cds=(239,1501) /gb=NM_015874 /gi=7706215 /ug=Hs.347340 /len=5360	NM_015874	NP_056958

Table 3AB, Genes Specific to OA (Mild and Severe) But Removing Genes Relevant to Co-Morbidities of OA & Hypertension, OA & Obesity, OA & Asthma, OA & Allergies, and OA & Systemic Steroids						
Spot	p-value	Clone ID	Gene Symbol	Description	Gene Acc No	Protein Acc. No.
6776	0.0209151	fcrb4696	GRIM19	cell death-regulatory protein GRIM19 (GRIM19), mRNA /cds=(212,895) /gb=NM_015965 /gi=21361821 /ug=Hs.279574 /len=1023	NM_015965	NP_057049
5217	0.021003	seob4805	ATP6V1D	ATPase, H transporting, lysosomal 34kDa, V1 subunit D (ATP6V1D), mRNA /cds=(177,920) /gb=NM_015994 /gi=19913437 /ug=Hs.272630 /len=1675	NM_015994	NP_057078
4597	0.0108226	seoa1104	MRPS33	mitochondrial ribosomal protein S33 (MRPS33), nuclear gene encoding mitochondrial protein, transcript variant 1, mRNA /cds=(139,459) /gb=NM_016071 /gi=16950595 /ug=Hs.83006 /len=727	NM_016071	NP_057155
4795	0.0133922	seob6413	EPLIN	epithelial protein lost in neoplasm beta (EPLIN), mRNA /cds=(102,2381) /gb=NM_016357 /gi=7705372 /ug=Hs.10706 /len=3655	NM_016357	NP_057441
6025	0.0388375	miob3928	BCAA	RBP1-like protein (BCAA), transcript variant 1, mRNA /cds=(467,4405) /gb=NM_016374 /gi=22035676 /ug=Hs.17428 /len=6065	NM_016374	NP_057458
8162	0.0268973	miob4184	HSPC148	hypothetical protein HSPC148 (HSPC148), mRNA /cds=(64,753) /gb=NM_016403 /gi=7705474 /ug=Hs.42743 /len=1046	NM_016403	NP_057487
4582	0.0113458	miob3354	LOC51315	hypothetical protein LOC51315 (LOC51315), mRNA /cds=(395,1174) /gb=NM_016618 /gi=7706155 /ug=Hs.5721 /len=1774	NM_016618	NP_057702

Table 3AB, Genes Specific to OA (Mild and Severe) But Removing Genes Relevant to Co-Morbidities of OA & Hypertension, OA & Obesity, OA & Asthma, OA & Allergies, and OA & Systemic Steroids							Protein Acc. No.
Spot	p-value	Clone ID	Gene Symbol	Description	Gene Acc No		
11645	0.0116222	seob3154	FLJ20003	hypothetical protein FLJ20003 (FLJ20003), mRNA /cds=(31,1188) /gb=NM_017615 /gi=8923008 /ug=Hs.258798 /len=1387	NM_017615		NP_060085
11379	0.0262807	mioc3580	FLJ20038	hypothetical protein FLJ20038 (FLJ20038), mRNA /cds=(274,720) /gb=NM_017634 /gi=8923043 /ug=Hs.72071 /len=2571	NM_017634		NP_060104
2174	0.0365115	mioa4057	TRPM7	transient receptor potential cation channel, subfamily M, member 7 (TRPM7), mRNA /cds=(272,5869) /gb=NM_017672 /gi=24308150 /ug=Hs.267914 /len=7259	NM_017672		NP_060142
9922	0.0289395	mioc0347	FLJ10769	hypothetical protein FLJ10769 (FLJ10769), mRNA /cds=(15,1187) /gb=NM_018210 /gi=8922653 /ug=Hs.8083 /len=2659	NM_018210		NP_060680
9466	0.012309	mioc2619	FLJ10891	hypothetical protein FLJ10891 (FLJ10891), mRNA /cds=(128,1525) /gb=NM_018260 /gi=8922743 /ug=Hs.274169 /len=2864	NM_018260		NP_060730
4578	0.023642	miob2687	NGLY1	N-glycanase 1 (NGLY1), mRNA /cds=(42,2006) /gb=NM_018297 /gi=21314689 /ug=Hs.63657 /len=2182	NM_018297		NP_060767
13306	0.0489116	mioc8264	FLJ11294	hypothetical protein FLJ11294 (FLJ11294), mRNA /cds=(160,4170) /gb=NM_018383 /gi=19923528 /ug=Hs.107000 /len=4602	NM_018383		NP_060853
7083	0.0243386	seob3751	C14orf11	chromosome 14 open reading frame 11 (C14orf11), mRNA /cds=(96,797) /gb=NM_018453 /gi=8922092 /ug=Hs.433269 /len=1264	NM_018453		NP_060923

Table 3AB, Genes Specific to OA (Mild and Severe) But Removing Genes Relevant to Co-Morbidities of OA & Hypertension, OA & Obesity, OA & Asthma, OA & Allergies, and OA & Systemic Steroids						
Spot	p-value	Clone ID	Gene Symbol	Description	Gene Acc No	Protein Acc. No.
5312	0.0418089	fcrb1992	TSGA14	testis specific, 14 (TSGA14), mRNA /cds=(48,1169) /gb=NM_018718 /gi=16306478 /ug=Hs.27027 /len=3526	NM_018718	NP_061188
322	0.0481607	mioa9541	H/ACA sm	nucleolar protein family A, member 1 (H/ACA small nucleolar RNPs) (NOLA1), transcript variant 1, mRNA /cds=(309,962) /gb=NM_018983 /gi=15011914 /ug=Hs.69851 /len=1273	NM_018983	NP_061856
13029	0.0296854	seoc4103	C3orf4	chromosome 3 open reading frame 4 (C3orf4), mRNA /cds=(881,1642) /gb=NM_019895 /gi=11096339 /ug=Hs.107393 /len=2820	NM_019895	NP_063948
3604	0.0290424	ncrc9483	Asp-Glu-Al	DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 24 (DDX24), mRNA /cds=(100,2679) /gb=NM_020414 /gi=14251213 /ug=Hs.155986 /len=2967	NM_020414	NP_065147
2874	0.0430874	seob4147	KIAA1533	KIAA1533 protein (KIAA1533), mRNA /cds=(379,2331) /gb=NM_020895 /gi=24308246 /ug=Hs.83575 /len=2724	NM_020895	NP_065946
9715	0.0282598	seoa6358	RDH14	retinol dehydrogenase 14 (all-trans and 9-cis) (RDH14), mRNA /cds=(64,1074) /gb=NM_020905 /gi=10190745 /ug=Hs.288880 /len=1538	NM_020905	NP_065956
13850	0.0277604	seoc2173	MI-ER1	mesoderm induction early response 1 (MI-ER1), mRNA /cds=(234,1844) /gb=NM_020948 /gi=24308260 /ug=Hs.222746 /len=4972	NM_020948	NP_065999

Table 3AB, Genes Specific to OA (Mild and Severe) But Removing Genes Relevant to Co-Morbidities of OA & Hypertension, OA & Obesity, OA & Asthma, OA & Allergies, and OA & Systemic Steroids						
Spot	p-value	Clone ID	Gene Symbol	Description	Gene Acc No	Protein Acc. No.
6421	0.0242694	mioa4014	APMCF1	APMCF1 protein (APMCF1), mRNA /cds=(17,832) /gb=NM_021203 /gi=14917112 /ug=Hs.12152 /len=1745	NM_021203	NP_067026
11810	0.0016135	fcr6826		egl nine 3 (C. elegans) (EGLN3), mRNA /cds=(327,1046) /gb=NM_022073 /gi=11545786 /ug=Hs.18878 /len=2770	NM_022073	NP_071356
9605	0.0076915	seoc2475	GalNAc-T1	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 11 (GalNAc-T11) (GALNT11), mRNA /cds=(84,1910) /gb=NM_022087 /gi=11545800 /ug=Hs.97056 /len=2591	NM_022087	NP_071370
2053	0.0084416	miod1505	DATF1	death associated transcription factor 1 (DATF1), transcript variant 1, mRNA /cds=(506,2194) /gb=NM_022105 /gi=18375616 /ug=Hs.155313 /len=2977	NM_022105	NP_071388
14897	0.0360837	seoc2931	FLJ21939	hypothetical protein FLJ21939 similar to 5-azacytidine induced gene 2 (FLJ21939), mRNA /cds=(380,1558) /gb=NM_022461 /gi=11968002 /ug=Hs.380413 /len=2248	NM_022461	NP_071906
13928	0.0208929	seoa6573	FLJ21080	hypothetical protein FLJ21080 (FLJ21080), mRNA /cds=(128,1237) /gb=NM_022743 /gi=12232400 /ug=Hs.8109 /len=1477	NM_022743	NP_073580
6640	0.0185101	seob1513	C6.1A	c6.1A (C6.1A), mRNA /cds=(3,953) /gb=NM_024332 /gi=13236582 /ug=Hs.301927 /len=2846	NM_024332	NP_077308

Table 3AB, Genes Specific to OA (Mild and Severe) But Removing Genes Relevant to Co-Morbidities of OA & Hypertension, OA & Obesity, OA & Asthma, OA & Allergies, and OA & Systemic Steroids							Protein Acc. No.
Spot	p-value	Clone ID	Gene Symbol	Description	Gene Acc No		
11469	0.0248666	seoc1230	FLJ13920	hypothetical protein FLJ13920 (FLJ13920), mRNA /cds=(28,462) /gb=NM_024558 /gi=13375724 /ug=Hs.13056 /len=1767	NM_024558		NP_078834
13736	0.0357916	mioc7818	DC50	hypothetical protein DC50 (DC50), mRNA /cds=(37,366) /gb=NM_031210 /gi=24475712 /ug=Hs.324521 /len=442	NM_031210		NP_112487
13370	0.046692	seob9750	HP43.8KD	HP43.8KD protein (HP43.8KD), mRNA /cds=(507,3635) /gb=NM_032557 /gi=27545312 /ug=Hs.332841 /len=4684	NM_032557		NP_115946
5140	0.037316	fcrb9871	FLJ14525	hypothetical protein FLJ14525 (FLJ14525), mRNA /cds=(20,1003) /gb=NM_032800 /gi=14249477 /ug=Hs.26812 /len=3733	NM_032800		NP_116189
10679	0.0115169	seoc0951	SYNE1	spectrin repeat containing, nuclear envelope 1 (SYNE1), transcript variant longest, mRNA	NM_033071		NP_149062
1870	0.0341647	fcr0604	PRAD1: pa	cyclin D1 (PRAD1: parathyroid adenomatosis 1) (CCND1), mRNA /cds=(210,1097) /gb=NM_053056 /gi=16950654 /ug=Hs.82932 /len=4306	NM_053056		NP_444284
5137	0.0009427	fcrb9588	UBC6 hom	ubiquitin-conjugating enzyme E2, J2 (UBC6 yeast) (UBE2J2), mRNA /cds=(205,879) /gb=NM_058167 /gi=17157996 /ug=Hs.352567 /len=2167	NM_058167		NP_477515
5220	0.0180064	seob5379	Cir12	Rattus norvegicus calcium-independent alpha-latrotoxin receptor 2 (Cir12), mRNA	NM_134408		NO DATA

Table 3AB, Genes Specific to OA (Mild and Severe) But Removing Genes Relevant to Co-Morbidities of OA & Hypertension, OA & Obesity, OA & Asthma, OA & Allergies, and OA & Systemic Steroids						
Spot	p-value	Clone ID	Gene Symbol	Description	Gene Acc No	Protein Acc. No.
4062	0.0423225	mioa8774	BCL6	B-cell CLL/lymphoma 6 (zinc finger protein 51) (BCL6), transcript variant 2, mRNA /cds=(421,2541) /gb=NM_138931 /gi=21040335 /ug=Hs.155024 /len=3630	NM_138931	NP_620309
5022	0.0248507	fcrb4542		ORM1-like 3 (S. cerevisiae) (ORMDL3), mRNA /cds=(141,602) /gb=NM_139280 /gi=27544926 /ug=Hs.374824 /len=2109	NM_139280	NP_644809
11242	0.0474608	fcrb2431	C14orf32	chromosome 14 open reading frame 32 (C14orf32), mRNA /cds=(135,872) /gb=NM_144578 /gi=21389356 /ug=Hs.406401 /len=2870	NM_144578	NP_653179
3638	0.0013631	ncrc9280	LOC15804	similar to hypothetical protein BC014127 (LOC158046), mRNA	NM_145283	NP_660326
14019	0.0070027	ncr3559	TUWD12	TUWD12 (TUWD12), mRNA /cds=(106,1542) /gb=NM_172240 /gi=26665868 /ug=Hs.25130 /len=2984	NM_172240	NP_758440
3727	0.043378	fcrb8991		Sec7p-like protein mRNA, partial cds. /cds=(1,801) /gb=U59752 /gi=1465756 /ug=Hs.8517 /len=997	U59752	AAB17532
11217	0.0236932	ncr0786		***** No hits found *****		
14454	0.0126139	hfcf8897		***** No hits found *****		
10512	0.0467122	mioc1292		POLY A		
4178	0.0017403	seoa1559				